

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A cylinder lock (1) and key (2) combination, ~~said key (2) comprising a key blade (200) having, at a side surface (201) thereof, a longitudinally extending groove (202) with a side wall (203) forming a longitudinally extending coded surface (203), and said cylinder lock (1) comprising~~

- a cylinder shell (140),
- a key plug (130) which is rotatably mounted in said shell,
- a longitudinal key slot (100) extending along said key plug in parallel to the rotational axis thereof for receiving ~~said key a key blade (200) having, at a side surface (201) thereof, a longitudinally extending groove (202) with a side wall (203) forming a longitudinally extending coded surface (203),~~

- at least one ~~side locking~~ tumbler assembly (110) having a ~~pair of adjacent body segments body segment (113, 114) each being provided with a contact portion finger (115)~~ reaching ~~sideways~~ into said key slot so as to engage with said coded surface (203) of a properly shaped key blade being inserted into said key slot, and

- at least one ~~side~~ cavity (120) located at a transversal side of said key slot (100) in said key plug (130), said ~~side~~ cavity accommodating an associated ~~one of said at least one tumbler assembly pair of body segments~~ and guiding the latter for elevational movement therein,

- ~~said at least one locking tumbler assembly (110) comprising a pair of adjacent~~

~~tumbler body segments (113, 114) accommodated in the same cavity, and~~

~~- each tumbler body segment (113, 114) having an associated contact portion (115, 116) reaching into said key slot (100);~~

characterised in that

- said adjacent side tumbler body segments (113, 114) in said pair are located on the same side of said key slot and are freely not connected to each other and are elevationally movable independently of each other in said side cavity so as to be individually displaced into respective elevational positions, and

- said associated contact ~~portions~~ fingers (115, 116) in said pair are axially separated in the longitudinal direction of the key plug such that these contact portions are located at a longitudinal distance from each other on the same side of said key slot and will be positioned at elevationally specific and generally different levels when being engaged by said coded surface (203) upon insertion of said key blade (200) into said key slot (100)

- whereby the side tumbler body segments (113, 114) in each pair are displaceable into a number of different positions relative to each other representing different codes.

2. (Currently Amended) A cylinder lock and key combination as defined in claim 1, wherein each segment in said pair of adjacent side tumbler body segments (113, 114) is guided in a respective portion of said cavity (120).

3. (Currently Amended) A cylinder lock and key combination as defined in claim 2, wherein said pair of adjacent side tumbler body segments (113, 114) have supplementary cross-sections, which together substantially correspond to the cross-section of said cavity (120).

4. (Currently Amended) A cylinder lock and key combination as defined in claim 3, wherein said adjacent side tumbler body segments (113, 114) of said pair are partially defined by part-cylindrical surface portions being guided by wall portions defining said cavity (120).

5. (Currently Amended) A cylinder lock and key combination as defined in claim 3, wherein said adjacent side tumbler body segments of said pair have mutually engaging surface portions (113a, 114a) being in sliding engagement with each other.

6. (Previously Presented) A cylinder lock and key combination as defined in claim 5, wherein said mutually engaging surface portions (113a, 114a) are substantially planar.

7. (Withdrawn and Currently Amended) A cylinder lock and key combination as defined in claim 1, wherein said key plug (130) contains a row of cavities (120), at least one of which accommodating a pair of adjacent side tumbler body segments (113, 114).

8. (Withdrawn and Currently Amended) A cylinder lock and key combination as defined in claim 1, wherein said key plug (130) includes at least one side locking tumbler assembly (113,114) on each transversal side of said key slot (100).

9. (Currently Amended) A cylinder lock and key combination as defined in claim 1, wherein said pair of adjacent side tumbler body segments (113, 114) cooperate with a side bar (150) being accommodated in a longitudinal recess (151) in said cylinder shell (140), said side bar (150) being adapted to normally lock the key plug against rotation in said shell and to be displaceable into a releasing position upon insertion of a properly coded key blade (200) into said key slot (100).

10. (Currently Amended) A cylinder lock and key combination as defined in claim 1, wherein said contact ~~portions~~ fingers of said side tumbler body segments (113,114) are constituted by outwardly projecting fingers (115,116).

11. (Currently Amended) A cylinder lock and key combination as defined in claim 10, wherein said contact fingers (115, 116) are positively guided in said longitudinally extending groove (202) upon insertion of said key blade into said key slot.

12. (Currently Amended) A cylinder lock (1) comprising:

a cylinder shell (140),

a key plug (130) which is rotatably mounted in said shell,

a longitudinal key slot (100) extending along said key plug in parallel to the rotational axis thereof for receiving a key blade (200) having, at a side surface (201) thereof, a longitudinally extending groove (202) with a side wall (203) forming a longitudinally extending coded surface (203),

at least one ~~locking side~~ tumbler assembly (110) having a ~~pair of adjacent body segments~~ ~~body segment~~ (113, 114) ~~each being provided with a contact portion finger~~ (115) reaching ~~sideways~~ into said key slot so as to engage with said coded surface (203) of a properly shaped key blade being inserted into said key slot, and

at least one ~~side~~ cavity (120) located at a transversal side of said key slot (100) in said key plug (130), said ~~side~~ cavity accommodating an associated ~~pair of body segments~~ ~~one of said at least one tumbler assembly~~ and guiding the latter for elevational movement therein,

~~said at least one locking tumbler assembly (110) comprising a pair of adjacent tumbler body segments (113, 114) accommodated in the same cavity, and~~

~~each tumbler body segment (113, 114) having an associated contact portion (115, 116) reaching into said key slot (100);~~

characterised in that

said adjacent ~~side~~ tumbler body segments (113, 114) in said pair are ~~located on the~~

~~same side of said key slot and are freely not connected to each other and are elevationally~~
movable independently of each other in said cavity so as to be individually displaced into
respective elevational positions, and

said associated contact ~~portions-fingers~~ (115, 116) in said pair are axially separated in
the longitudinal direction of the key plug such that these contact portions are located at a
longitudinal distance from each other ~~on the same side of said key slot~~ and will be positioned
at elevationally specific and generally different levels when being engaged by said coded
surface (203) upon insertion of said key blade (200) into said key slot (100),

whereby the ~~side~~ tumbler body segments (113, 114) in each pair are displaceable into
a number of different positions relative to each other representing different codes.

13. (Currently Amended) A key blade (200) for use in a cylinder lock and key system
~~said lock~~ comprising:

a cylinder shell (140),
a key plug (130) which is rotatably mounted in said shell,
a longitudinal key slot (100) extending along said key plug in parallel to the rotational
axis thereof for receiving a key blade (200) ~~having, at a side surface (201) thereof, a~~
~~longitudinally extending groove (202) with a side wall (203) forming a longitudinally~~
~~extending coded surface (203),~~

at least one ~~locking-side~~ tumbler assembly (110) ~~in said cylinder lock having a pair of~~

~~adjacent body segments body segment (113, 114), each being provided~~ with a contact ~~portion finger (115) reaching sideways~~ into said key slot so as to engage with said coded surface (203) of a properly shaped key blade being inserted into said key slot, and

at least one ~~side cavity (120)~~ located at a transversal side of said key slot (100) in said key plug (130) ~~of said cylinder lock~~, said ~~side cavity~~ accommodating an associated ~~pair of body segments one of said at least one tumbler assembly~~ and guiding the latter for elevational movement therein,

~~said at least one locking tumbler assembly (110) comprising a pair of adjacent tumbler body segments (113, 114) accommodated in the same cavity, and~~

~~each tumbler body segment (113, 114) having an associated contact portion (115, 116) reaching into said key slot (100);~~

characterised in that

~~wherein said side adjacent tumbler body segments (113, 114) in said pair are located on the same side of said key slot and are freely not connected to each other and are elevationally movable independently of each other in said side cavity so as to be individually displaced into respective elevational positions, and~~

said associated contact ~~portions fingers (115, 116)~~ in said pair are axially separated in the longitudinal direction of the key plug such that these contact portions are located at a longitudinal distance from each other ~~on the same side of said key slot~~ and will be positioned at elevationally specific and generally different levels when being engaged by said coded

surface (203) upon insertion of said key blade (200) into said key slot (100),

whereby the side tumbler body segments (113, 114) in each pair are displaceable into a number of different positions relative to each other representing different codes; and

said key blade (200) having, at said side surface (201) thereof, said longitudinally a longitudinally extending groove (202) with said side wall (203) forming a longitudinally extending coded surface (203);

characterised in that

said longitudinally extending coded surface (203) of said key blade (200) comprises at least one pair of neighbouring code surface portions (204, 205) located at elevationally specific and generally different levels for co-operation with the respective contact portions fingers of a pair of adjacent side tumbler body segments of said lock a lock.

14. (Currently Amended) A key blade as defined in claim 13, wherein said longitudinally extending groove (202) positively guides said respective contact portions, which are constituted by outwardly projecting fingers, when the key blade is inserted into a lock.

15. (Withdrawn) A key blade as defined in claim 13, wherein said key blade (200) is symmetrical with longitudinal coded surfaces on each side thereof.

16. (Withdrawn) A key blade as defined in claim 13, wherein said coded surface (203) comprises a longitudinal row of pairs (204, 205) of neighbouring code surface portions.

17. (Currently Amended) A key blank for producing a key blade for use in a cylinder lock and key combination comprising:

a cylinder shell (140),

a key plug (130) which is rotatably mounted in said shell,

a longitudinal key slot (100) extending along said key plug in parallel to the rotational axis thereof for receiving a key blade (200) ~~having, at a side surface (201) thereof, a longitudinally extending groove (202) with a side wall (203) forming a longitudinally extending coded surface (203),~~

at least one ~~locking side~~ tumbler assembly (110) in said ~~cylinder lock~~ having a pair of ~~adjacent body segments~~ ~~body segment~~ (113, 114) each being provided with a contact portion ~~finger~~ (115) reaching ~~sideways~~ into said key slot so as to engage with said coded surface (203) of a properly shaped key blade being inserted into said key slot, and

at least one ~~side~~ cavity (120) located at a transversal side of said key slot (100) in said key plug (130) ~~of said cylinder lock~~, said ~~side~~ cavity accommodating an associated pair of ~~body segments~~ ~~one of said at least one tumbler assembly~~ and guiding the latter for elevational movement therein,

~~said at least one locking tumbler assembly (110) comprising a pair of adjacent tumbler body segments (113, 114) accommodated in the same cavity, and~~

~~each tumbler body segment (113, 114) having an associated contact portion (115, 116) reaching into said key slot (100);~~

~~wherein said adjacent side tumbler body segments (113, 114) in said pair are located on the same side of said key slot and are freely not connected to each other and are elevationally movable independently of each other in said side cavity so as to be individually displaced into respective elevational positions,~~

~~said associated contact portions/fingers (115, 116) in said pair are axially separated in the longitudinal direction of the key plug such that these contact portions are located at a longitudinal distance from each other on the same side of said key slot and will be positioned at elevationally specific and generally different levels when being engaged by said coded surface (203) upon insertion of said key blade (200) into said key slot (100), and~~

~~whereby the tumbler body segments (113, 114) in each pair are displaceable into a number of different positions relative to each other representing different codes, and~~

~~said key blade (200) having, at a side surface (201) thereof, a longitudinally extending groove (202) with a side wall (203) forming a longitudinally extending coded surface (203),~~

~~characterised in that~~

~~said longitudinally extending coded surface (203) of the key blade is cut out from at least one material portion at the side of the key blade so as to form a pair of neighbouring~~

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code surface portions (204,205) for cooperation with the respective contact ~~portions-fingers~~
of a pair of adjacent ~~side~~ tumbler segments in the cylinder lock.

18. (Withdrawn) A key blank as defined in claim 17, wherein the coded surface (203) is undercut.